

Integration of RGB "Dust" Imagery to Operations at the Albuquerque Forecast Office

¹Kevin Fuell, ²Brian Guyer

¹*NASA-SPoRT/ University of Alabama in Huntsville, Huntsville, AL*

²*NOAA National Weather Service-Albuquerque Forecast Office, Albuquerque, NM*

The NASA/Short-term Prediction, Research, and Transition (SPoRT) Program has been providing unique Red-Green-Blue (RGB) composite imagery to its operational partners since 2005. In the early years of activity these RGB products were related to a True Color RGB, showing what one's own eyes would see if looking down at earth from space, as well as a Snow-Cloud RGB (i.e. False Color), separating clouds from snow on the ground. More recently SPoRT has used the EUMETSAT Best Practices standards for RGB composites to transition a wide array of imagery for multiple uses. A "Dust" RGB product has had particular use at the Albuquerque, New Mexico WFO. Several cases have occurred where users were able to isolate dust plume locations for mesoscale and microscale events during day and night time conditions. In addition the "Dust" RGB can be used for more than just detection of dust as it is sensitive to the changes in density due to atmospheric moisture content. Hence low-level dry boundaries can often be discriminated. This type of imagery is a large change from the single channel imagery typically used by operational forecast staff and hence, can be a challenge to interpret. This presentation aims to discuss the integration of such new imagery into operational use as well as the benefits assessed by the Albuquerque WFO over several documented events.